

CLAIMS

1. An actuator and containment device for a syringe of the type comprising at
5 least a barrel and piston means displaceable within the barrel to expel any
contents of the barrel, usually via a hollow needle, said device comprising a
hollow body, a spring and a plunger, in which respect the hollow body has
internal latching formations and is adapted to house the syringe barrel and
piston means with any needle projecting outside the body, the spring is
10 disposed to act between the body and the syringe barrel, which barrel, in initial
use of the device, is retained against the force of the spring by means of the
latching formations, and the plunger is slidably located in the body to displace
the piston means of the syringe, provides means whereby the latching
formations of the body can be disengaged from the syringe barrel enabling the
15 spring to retract the entire syringe, including any needle, into the hollow body,
and also provides a chamber for reception of at least a portion of the syringe
after the spring has so acted, characterised in that the plunger has deflectable
edge members whereby it can abut and displace the piston rod and the hollow
body has internal deflector means which serve to deflect the edge members of
20 the plunger out of the path of retraction of the syringe barrel.
2. A device according to claim 1 wherein the hollow body is generally of
cylindrical form and has a longitudinal axis and also defines a main chamber
in which the plunger is slidably located and a forward chamber which is of

smaller cross-section than the main chamber and extends from the main chamber beyond the end of plunger movement to house the syringe barrel in initial use of the device.

3. A device according to claim 2 wherein the latching formations of the body are
5 provided in the main chamber of the body adjacent to the forward chamber but lying radially outwardly with respect to the forward chamber.
4. A device according to claim 2 or 3 wherein the latching formations extend
generally parallel with the longitudinal axis of the hollow body to free ends
10 which have radially inwardly directed catch means for retaining the syringe barrel against the force of the spring, the latching formations also being deflectable radially outwardly to enable capture of the syringe barrel by said catch means and its later release therefrom.
- 15 5. A device according to claim 4 wherein the plunger and the latching formations have co-operating surface portions whereby the plunger can effect radially outward deflection of the latching formations to release the syringe barrel from the catch means.
- 20 6. A device according to any of claims 2 to 5 wherein the hollow body and the plunger have mutually co-operating guide means which extend substantially parallel to the longitudinal axis of the body and minimize relative rotation between the body and the plunger.

7. A device according to any preceding claim wherein the hollow body is moulded in one piece and the latching formations are integrally moulded therewith.
- 5 8. A device according to any preceding claim wherein the latching formations are symmetrically arranged in the interior of the hollow body.
9. A device according to any preceding claim wherein the deflectable edge members are symmetrically arranged at the forward edge of the plunger.
- 10 10. A device according to any preceding claim consisting of only a hollow body, a spring and a plunger.
11. An assembly comprising a syringe and an actuator and containment device for
15 said syringe as claimed in any preceding claim, said syringe comprising a barrel, a hollow needle, and piston means displaceable within the barrel to expel contents of the barrel via said needle, wherein the hollow body of the device houses the syringe barrel and piston means with the needle initially projecting outside the body and the spring is disposed inside the body and acts
20 between the body of the device and the barrel of the syringe.
12. An assembly comprising a syringe and an actuator and containment device for said syringe as claimed in any of claims 1 to 10, said syringe comprising at least a barrel and piston means displaceable within the barrel to expel contents

of the barrel, usually via a needle, wherein the hollow body of the device houses the syringe barrel and piston means and the spring is disposed inside the body and acts between the body of the device and the barrel of the syringe.